Synopsis
on

Behavioral Factors Affecting Intuitive Ability and Cognitive Capability: A Study of Efficacy of Stock Market Investors

Research Scholar
Rupali Misra Nigam
Department of Management
Faculty of Social Sciences
Dayalbagh Educational Institute

Research Supervisor
Dr. Sumita Srivastava
Assistant Professor
Department of Management
Faculty of Social Sciences
Dayalbagh Educational Institute
Agra

Research Co-Supervisor
Prof. D. K. Banwet
Professor Emeritus
Department of Management Studies
IIT – Delhi

Table of Contents

		Pg
Section I	**INTRODUCTION**	2
Section II	**REVIEW OF LITERATURE**	3
Section III	3.1. Need of the Study	5
	3.2. Objectives of the Study	5
	3.3. Conceptual Framework and Hypothesis	5
	3.3.1. Behavioral factors affecting intuitive ability and cognitive capability	6
	3.3.1.1. Psychological Dispositions (or Personality Types)	6
	3.3.1.2. Consciousness Quotient	7
	3.3.1.3. Mindfulness	7
	3.3.1.4. Religiosity	7
	3.3.2. Intuitive Ability and Cognitive Capability	8
	3.3.2.1 Intuitive Ability	8
	3.3.2.2. Cognitive Capability	8
	3.3.3. Efficacy of stock market investors	9
	3.3.4. Moderator Relationships	9
	3.3.4.1. Moderator relationship between psychological disposition and intuitive ability and cognitive capability	9
	3.3.4.2. Moderator relationship between religiosity and intuitive ability and cognitive capability	9
	3.3.4.3. Moderator relationship between intuitive ability and cognitive capability and efficacy of stock market investors	10
	3.4 Study Benefits	11
	3.4.1. Study Benefits for Practitioners	11
	3.4.2. Study Benefits for Academicians	12
Section IV	**AN OVERVIEW OF THE PROPOSED RESEARCH**	13
	4.1. Scope of the Study	13
	4.2. Instruments/ Techniques to be used	13
	4.3. Statistical Measurements	13
	4.4. Sampling	13
	4.4.1. Sample composition	13
	4.4.2. Sampling Techniques	13
	4.4.3. Sample Size	13
Section V	**CHAPTERIZATION**	15
Section VI	**REFERENCES**	16

Section - I

1. Introduction

There are three reflections in literature about individual's preference to process information, prior to decision-making. They are cognitive or rational processing, intuitive processing and dual processing.

Traditional theories of finance are based on the premise that scientifically valid information or knowledge results in a rational decision which pursues a logic of consequences (March 1994). Simon (1957) identified rational decision-making as a three step procedure including – identification of problem, inventing, developing and analysing alternatives, and then selecting the best alternative. These theories emphasize the operation of analytic processes, deliberation and rationality in guiding choice behavior.

However, researchers argue the applicability and validity of rational processing owing to lack of information, complexity, resource limitation, behavioral variations and biases (Kornev and Thissen 2000; Gilovich 2002; Dijksterhuis 2004b; Dijksterhuis et al. 2006). They conclude that a more intuitive or emotional response can play a key role in human decision-making (Damasio et al. 1994; Loewenstein et al. 2001). Researchers conclude that when the tasks cannot be performed through analysis; working associatively, intuitively and tacitly may be the more advantageous thinking style (Wilson 2002; Wittemen et al. 2009).

The third school of thought proposes parallel dual operating system theory – with cognitive and rational processing (Sloman 2002; Hammond 1993; Kahneman and Tversky 1972), which is widely applied in business and managerial decision-making research (Dane and Pratt 2007; Sadler and Shefy 2004; Bruner 1962; Hogarth 2005; Kahneman and Frederick 2002). The researchers have proposed an integrated model of analytical and intuitive decision-making where both approaches are used in a complementary, iterative and harmonious fashion (Sinclair and Ashkanasy 2005; Epstein et al. 1998), and the dominance of either approach is determined by dispositional and contextual factors (Burke and Miller 1999).

This proposed research is based on the third reflection, i.e., parallel dual operating system theory where rationality operates in conjunction with intuition on an iterative and harmonious fashion. Thereby, the two components of dual information processing system – intuitive ability and cognitive capability have been studied. Intuitive ability provides condensed overview of information quickly without much reflection or conscious reasoning. Intuitive ability lies in non-sequential information processing mode which originates beyond consciousness (Price and Norman 2008; Kahneman 2002; Hitt et al. 2005; Sinclair and Ashkanasy 2005; Bastick 1982, 2003; Epstein 1998; Parikh et al. 1994; Petitmengin and Peugeot 1999; Simon 1987). Cognitive capability, referred also as cognitive flexibility, on the other hand, is the human ability to adapt cognitive processing strategies to face new and unexpected conditions and is intrinsically linked to attentional processes (Cañas et al. 2003). It is referred to as the ability to interrupt automated responses, suppress interfering information and focus or direct the attention. Hence, in this work, we refer intuitive ability as the manifestation of intuitive information processing and cognitive capability as the manifestation of rational information processing.

Section – II

2. Review of Literature

Stock market investors behave according to how they frame (Tversky and Kahneman 1981) the situations. The difference of framing is due to difference of opinion (Miller 1977), even when investors have the same basic information. This difference of opinion can be large refuting rationality and traditional models. Researchers argue that such heuristic driven biases impact the performance of stock market investors. To name a few, these are representative bias (Shefrin 2001; Lakonishok et al. 1994; De Bondt and Thaler 1985; Dhar and Kumar 2001), cognitive dissonance (Akerlof and Dickens 1982; Goetzmann and Peles 1997), familiarity bias (Huberman 2001; French and Poterba 1991; Coval and Maskowitz 1999), overconfidence (Barber and Odean 2001; Gervais and Odean 2001; Fischoff and Slovic 1980), endowment effect (Thaler 1980; Kahneman et al. 1990), status quo bias (Samuelson and Zeckhauser 1988), and so on.

Behavioral studies also show that financial loss can bias behavior and modulate choice (Kahneman and Tversky 1979; Green and Swets 1989; Glimcher and Rustichini 2004; Rangel et al. 2008; Sokol et al. 2009). This has also been reflected in neurological studies that amygdala mediates loss aversion implicating that this brain structure is involved in processing fear and threat, as well as in anticipation and experience of monetary loss (Martino et al. 2010). Monetary loss or loss conditioning alters perceptual threshold of risk and compromises future decisions via amygdala and prefrontal networks suggesting possible link between risk perception and investor decision making (Laufer and Paz 2012).

Past studies reflect that an investment in stock market is influenced by investor's risk perception, risk attitude, risk tolerance, investment intentions and willingness to assume risk (Lo and Repin 2002). Literature also provides theoretical and empirical evidence that investors' perception of risk (Mayfield et al. 2008; Bolton et al. 2006), risk attitude (Warnerd 1996; Lauriola and Levin 2001), willingness to assume risk (Carducci and Wong 1998; Mayfield et al. 2008; Bolton et al. 2006), investment intentions (Mayfield et al. 2008), are affected by their psychological dispositions or personality types.

Researches also suggest an important link between decision making and emotion (Grossberg and Gutowski 1987; Damasio 1994; Elster 1998; Loewenstein 2000; Peters and Slovic 2000; Lucey and Dowling 2005). Prospect theory (Kahneman and Tversky 1979) reflects that domain of gain and domain of loss is treated differently, i.e. individuals tend to be risk averse in a domain of gains and relatively risk seeking in a domain of losses. Lo and Repin (2002) concluded that emotional reaction to monetary gains and losses is more intense on both the positive and negative side exhibiting significantly worse trading performance. Fear and greed (Lo et al. 2005) of investors also affect the irregularities and behavioral biases.

More recently, there have been studies on the role of attentional focus and inner awareness for the efficacy of decision making. Psychological, clinical and psychophysical studies on mindfulness reflect that mindfulness improves effective handling of negative emotion under stress (Borkovec 2002; Davidson 2000; Davidson and Irwin 1999). Mindfulness develops attentional performance (Tang et al. 2007) through sustained attention (Slagter 2007; Slagter et al. 2009; Lutz et al. 2009; MacLean et al. 2010) and selective attention. Researches indicate that mindfulness improves

threshold for conscious perception, skills in switching/flexibility, and visual working memory capacity (Carter et al. 2005; Bishop et al. 2004; Jensen et al. 2012; Borkovec 2002). People who have undergone extensive meditation have shown improvements on cognitive performance (Austin 1998; Grossman et al. 2004; Cahn and Polich 2006) and mood (Davidson et al. 2003). Bartolomeo et al. (2011) studied that meditation has a positive impact in developing a collective mind and further developing trust and reciprocity in an investment game (Berg et al. 1995). Brazdau and Mihai (2008) claim that a person with higher consciousness quotient can access plenty of information simultaneously imparting greater awareness and wider perspective. Thus, mindfulness and consciousness quotient enhances efficacy of decision making (Zeidan et al. 2010).

Also, classical studies of religion emphasize religion's ability to assuage fear and uncertainty (Malinowski 1925). Recent studies on religion indicate a correlation between religion and risk aversion (Halek and Eisenhauer 2001), indicating the role of religiosity in decision making.

Section – III

3.1. Need of the Study

There has been lot of work on behavioral factors affecting the professional competence of stock market investors. Investors' psychological dispositions and sentiments are the top most variables studied in literature. As stated earlier, literature supports dual component theory of information processing where rationality operates in conjunction with intuition on an iterative and harmonious fashion. There are studies which explore the role on intuition in decision making (Dane and Pratt 2007). These studies reflect that intuitive decision making saves time and cognitive resources, releasing these resources for other management activities (Davis and Davis 2003). So, intuition can lead to effective work performance. There are also studies that reflect on a possible relationship between intuitive ability and forecasting accuracy of stock market investors (Harteis and Gruber 2007). However, most of these studies are theoretical in approach. Thus, empirical evidence is lacking. Also, behavioral factors which affect and/or develop intuitive ability and cognitive capability of stock market investors are not very conclusive in literature. Hence, through this study, we propose to empirically test the role of intuitive ability and cognitive capability on the efficacy of stock market investors. Also, we wish to examine the possible behavioral factors which affect intuitive ability and cognitive capability.

3.2. Objectives of the Study

The objectives of the study are:

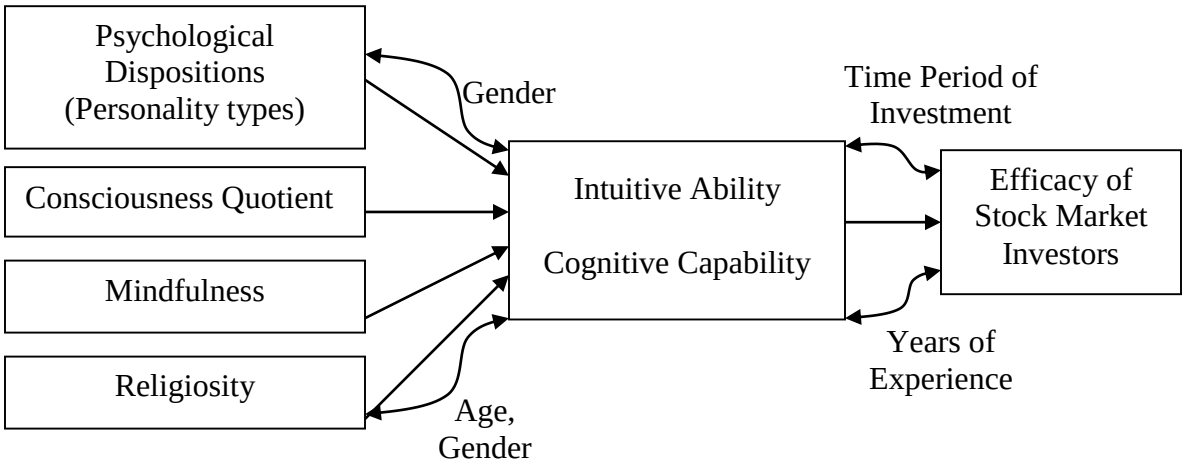
1. To assess the role of intuitive ability and cognitive capability on efficacy of stock market investors.
2. To investigate the behavioral factors affecting intuitive ability and cognitive capability of stock market investors.
3. To make recommendations to stock market investors in particular and to other decision makers in general, the role of behavioral factors for enhancing the efficacy of their decision making.

3.3. Conceptual Framework and Hypothesis

In this study, we propose an integrated conceptual framework of behavioral factors affecting intuitive ability and cognitive capability and how they, in turn, improve the efficacy of stock market investors. Based on the literature, we suggest psychological dispositions, mindfulness, consciousness quotient and religiosity as four possible behavioral factors which affect intuitive ability and cognitive capability.

A conceptual framework, illustrating key constructs of the present study, is presented in Figure 1.

Figure 1
Conceptual Framework: Behavioral Factors Affecting Intuitive Ability and Cognitive Capability of Stock Market Investors



Let us discuss the components of the proposed framework briefly.

3.3.1. Behavioral factors affecting intuitive ability and cognitive capability

Researcher proposes four behavioral factors which affect intuitive ability and cognitive capability of the stock market investors and possibly improve their efficacy. They are: 1) Psychological Dispositions, 2) Consciousness Quotient, 3) Mindfulness and 4) Religiosity.

3.3.1.1. Psychological Dispositions (or Personality Types)

Several authors suggest that the professional competence of the stock market investors is influenced by the personality type or psychological disposition. They contemplate that an investors' preference to intuitive processing or rational thinking style is governed by his psychological disposition (Witteman et al. 2009). Researchers have argued that a deeper understanding of personality trait promises to enrich economic theory and to understand the sources of, and solutions for, human inequality (Borghans et al. 2008). Through this study, we wish to identify that, are individuals' investment intentions only discernable, or are those also amendable. Therefore, we hypothesize:

Hypothesis 1: Psychological disposition influences intuitive ability of stock market investors.

A review of literature identifies that personality type significantly impacts perception, intention, tolerance and willingness of the investor to assume risk (Mayfield et al. 2008; Carducci and Wong 1998; Filbeck et al. 2005). Therefore, we hypothesize:

Hypothesis 2: Psychological disposition influences cognitive capability of stock market investors.

3.3.1.2. Consciousness Quotient

Brazdau (2008) introduced the concept of the consciousness quotient (CQ) theory and the CQ inventory. He defined CQ as the level of consciousness (or the level of being conscious) that is experienced in the morning, ½-1 hour after we are awake, after a refreshing sleep, without being exposed to any significant stimulus: coffee, TV, radio, music, talking etc. (Brazdau 2009). In other words, the consciousness quotient is the general level of being conscious or aware throughout a day, in regular life conditions. Consciousness encompasses both awareness and attention such that attention continually pulls figures out of the ground of awareness, holding them focally for varying lengths of time (Brown and Ryan 2003).

Greater awareness supports holistic processing of information and an intuitive or instinctive behavior to make quick or accurate decisions, often with imperfect data sets (Khumalo 2009). Therefore, we hypothesize:

Hypothesis 3: Higher the consciousness quotient, higher the intuitive ability of the stock market investors.

On the other hand, attentional focus improves the ability to interrupt autonomous responses and suppress interfering information (Moore and Malinowski, 2009). Therefore, we hypothesize:

Hypothesis 4: Higher the consciousness quotient, higher the cognitive capability of the stock market investors.

3.3.1.3. Mindfulness

Jon Kabat-Zinn (2006) defines mindfulness as the awareness that emerges through paying attention on purpose, in the present moment, and non-judgmentally to the unfolding of experience moment by moment. The recent studies by neuroscientists indicate that meditation improves executive functioning (Zeidan et al. 2010).Therefore, we hypothesize:

Hypothesis 5: Higher the mindfulness, higher the intuitive ability of the stock market investors.

On the other hand, various studies reflect that mindfulness induces a set of integrated physiological changes termed as relaxation response, stress reduction, and an increase in attention (Lazar et al. 2000). This improves attentional focus or the ability to interrupt automated response (Greenberg et al. 2012). Therefore, we hypothesize:

Hypothesis 6: Higher the mindfulness, higher the cognitive capability of the stock market investors.

3.3.1.4. Religiosity

Religiosity, in its broadest sense, is a comprehensive sociological term used to refer to the numerous aspects of religious activity, dedication, and belief. The past literature relates effect of religion, religious beliefs and religiosity on corporate decision making (Hilary and Hui 2007). Recent researches indicate that religion plays a significant role in influencing judgment, emotional

and motivational qualities, frame of reference based on a connection with a transcendent and ultimate reality (Fernando and Jackson 2006). Studies also show that intuition and prayer are two faces of the same coin, and argues that both forms of decision processes (e.g. rational and non-rational analysis) might coexist perfectly in an integrative frame (Vasconcelos 2009). Therefore, we hypothesize:

Hypothesis 7: Higher the religiosity, higher the intuitive ability of stock market investors.

There are two schools of thought connecting a link between religious belief and cognitive capability. The earlier studies suggest a negative relationship between the two (Leuba 1916; Larson and Witham 1997). However, some recent studies (Bertsch and Pesta 2009) refer cognitive capability as high IQ and observe its positive link with religiosity. Therefore, we hypothesize:

Hypothesis 8: Higher the religiosity, higher the cognitive capability of stock market investors.

3.3.2. Intuitive Ability and Cognitive Capability

3.3.2.1 Intuitive Ability

Literature provides various reflections on the meaning of intuition. For the purpose of this research intuition refers to the domain-specific capability to reach an appropriate decision without deliberately balancing various alternatives and without reflecting on a task (Myers 2002). Dane and Pratt (2007) reflect that intuition draws on our inborn ability to synthesize information quickly and effectively — an ability that may be hindered by more formalized procedures. Evidence exists that relying on intuition can improve decision making under the constraints of bounded rationality (Damasio et al. 1994; Loewenstein et al. 2001; Sadler and Smith 2004; Agor 1986; Andersen 2000; Isenberg 2001; Khatri and Ng 2000; Westcott 1968). We refer to this ability as an important construct in the conceptual framework. Therefore, we hypothesize:

Hypothesis 9: Higher the intuitive ability of stock market investors, higher the efficacy of stock market investors.

3.3.2.2. Cognitive Capability

Cognitive capability is the human ability to adapt cognitive processing strategies to face new and unexpected conditions and is intrinsically linked to attentional processes (Canas et al. 2003). Cognitive capability or cognitive flexibility implies the ability to interrupt or de-automatise automated responses, i.e. is to respond non-habitually and suppress interfering information.

Researches also emphasize the importance of rational decision making or cognitive capability as a superior way of processing information for important and complex choices (Acker 2008; Newell et al. 2008; Payne et al. 2007; Lerouge 2009). Therefore, we hypothesize:

Hypothesis 10: Higher the cognitive capability of stock market investors, higher the efficacy of stock market investors.

3.3.3. Efficacy of stock market investors

Efficacy of stock market investors is the ability to forecast with reasonable accuracy the market movement. Investors always want to invest when the prices are low and exit when the prices are high. This calls for the ability to forecast the share prices.

3.3.4. Moderator Relationships

The proposed conceptual framework also suggests some moderator relationships. On the basis of past literature, researchers identify two moderators between behavioral antecedents and intuitive and cognitive capability. The literature also suggests two moderators of the consequents of intuitive and cognitive capability. Below is the brief discussion of the same.

3.3.4.1. Moderator relationship between psychological disposition and intuitive ability and cognitive capability

3.3.4.1.1. Gender

Literature identifies that gender is an important moderator influencing the relationship between psychological dispositions and intuitive as well as cognitive capability of individuals. Studies reflect that women are more intuitive than men (Agor 1986; Pacini and Epstein 1999). These studies indicate that female decision-makers seem to have better access to intuition than their male counterparts because of their superior encoding and decoding skills, which are a result of their higher estrogen levels (Lieberman 2000). Therefore, we hypothesize:

Hypothesis 11: Gender of the investor influences the relationship between psychological disposition and investors' intuitive ability.

Researchers reflect that certain personality type combined with gender effects perform better cognitively (Borg and Stranahan 2002). Several studies even reported women score higher on analysis (Hayes and Allinson 1996; Kirton 1994). Therefore, we hypothesize:

Hypothesis 12 : Gender of the investor influences the relationship between psychological disposition and investors' cognitive capability.

3.3.4.2. Moderator relationship between religiosity and intuitive ability and cognitive capability

3.3.4.2.1. Gender

Literature identifies that gender behaves as a moderator between religiosity and intuitive ability and cognitive capability of individuals. Researches reflect that black women significantly exceeded black men in levels of religiosity (Levin and Taylor 1993). Studies also reflect the gender differences are greater in individuals who are low on religiosity (Jensen and Jensen 1993). Therefore, we hypothesize:

Hypothesis 13 : Gender of the investor influences the relationship between religiosity and investors' intuitive ability.

Physiological studies indicate religiosity has varied response on blood pressure of males and females suggesting protective effect of religiosity against stress (Tartaro et al. 2005) and further on cognition. Therefore, we hypothesize:

Hypothesis 14 : Gender of the investor influences the relationship between religiosity and investors' cognitive capability.

3.3.4.2.2. Age

Various researches have studied the impact of age on individual's intuitive ability and cognitive capability. These studies argue that intuition improves with the age of an individual (Bruner and Clinchy 1966). Researchers have tried to study the relationship between religiosity and age. These studies reflect that religiosity increases with age, with the greatest increase occurring between 18 and 30 (Argue et al. 1999). Studies also discuss that older population have higher inclination on religious participation and spirituality (Taylor et al. 2007). Therefore, we hypothesize:

Hypothesis 15: Greater the age of investor, stronger the relationship between religiosity and intuitive ability

Researches also suggest heightened reactivity to stressors in older adulthood. Changes in the aging brain may explain this effect (Mroczek and Almeida 2004). Studies also indicate that misconceptions decrease with age (Fischbein and Schnarch 1997) suggesting improved cognition. Therefore, we hypothesize:

Hypothesis 16 : Greater the age of investor, stronger the relationship between religiosity and cognitive capability

3.3.4.3. Moderator relationship between intuitive ability and cognitive capability and efficacy of stock market investors

In this section, we discuss the moderator variables between intuitive ability and cognitive capability and efficacy of the stock market investors.

3.3.4.3.1. Time period of investment

Literature explores horizon effect as a factor influencing decisions in stock market (Barberis 2000). Studies reflect that the traders follow intuitive decision making when the investment horizon is short (Froot et al. 1992). Therefore, we hypothesize:

Hypothesis 17 : Time period of investment influences the relationship between intuitive ability and efficacy of stock market investors

Studies also reflect that even with uncertainty as a construct, there is enough predictability in returns for long term investors (Barberis 2000). Therefore, we hypothesize:

Hypothesis 18 : Time period of investment influences the relationship between cognitive capability and efficacy of stock market investors

3.3.4.3.2. Years of experience

There are various studies which suggest that intuitive ability of individuals is correlated positively with the years of experience (Hogarth 2001). These studies claim that intuition makes use of knowledge-resources secured through individuals' professional experiences (Reber 1993). Therefore, we hypothesize:

Hypothesis 19 : Longer the years of experience in the stock market, stronger the relationship between intuitive ability and efficacy of stock market investors

Studies have also tested the link between expertise and cognitive capability of individuals. These studies report that novices' cognitive schemata are less elaborate, interconnected, and accessible than experts' (Borko and Livingston 1989). Hammond (1987) concluded that experts show higher cognitive score on the cognitive continuum index. Therefore, we hypothesize:

Hypothesis 20: Longer the years of experience in the stock market, stronger the relationship between cognitive capability and efficacy of stock market investors

3.4 Study Benefits

3.4.1. Study Benefits for Practitioners

The efficacy of the stock market investor or a live trader is directly related to his ability to predict the market movements correctly. The efficacy is further enhanced by when the investor is able to outperform the market index. Ability to predict the market movement is a function of intuitive ability and cognitive capability reflected by investor decision making. Trader cognition helps decipher past and present data while trader intuition plugs missing data to view the situation objectively. This research integrates cognitive and intuitive ability of the investor translating into his professional competence.

Further, this research studies behavioural antecedents of investor's intuitive and cognitive capability. Instantaneous variables like investors' emotions, sentiments, biases and mood will have an impact of the decision makers' cognitive and intuitive abilities. However, the ability of the investor to control such emotions through self-talk, think-before-you-act and using working memory and recall directly improves his decision making. This study aims to recommend to the stock market investors in particular and to other decision makers in general, the role of behavioral factors for enhancing the efficacy of their decision making.

3.4.2. Study Benefits for Academicians

Decision making continues to remain one of the most discussed area in research. Efficient decision making requires the ability of the decision maker to forecast the outcome of each available option and determine the best alternative. This research studies the executive functioning of a stock market investor and explores its possible role in investor decision making.

The role of behavioural variables like psychological disposition, mindfulness, consciousness and religiosity is not very conclusive in the present literature on behavioural finance. This study investigates a possible role of the mentioned behavioural constructs in investor decision making, in particular, and other decision makers, in general. Hence, this research will add the present literature available on behavioural finance, consciousness in organizations, and behavioural antecedents of decision-making process.

Section – IV

An Overview of the Proposed Research

4.1. Scope of the Study

The scope of the study includes investors, live traders and employees of top brokering companies who hold a dematerialization account in either NSDL (National Securities Depository limited) or CDSL (Central Depository Services limited), operated through any depository participants, of any demographics. An attempt will be also made to include respondents investing in the global stock markets through dematerialization accounts held in other depositories of the world.

4.2. Instruments/ Techniques to be used

Relevant acceptable international inventories will be used for the assessment of psychological dispositions, information processing style, religiosity, mindfulness, attentional focus and consciousness quotient.

4.3. Statistical Measurements

Relevant statistical measurements like reliability coefficient Cronbach's alpha, ANOVA, Correlation and Regression Analysis, t-test and other descriptive statistics will be used.

4.4. Sampling

4.4.1. Sample Composition

The investors, live traders and employees of the depository participants who are investing in the stock markets through their dematerialization account in either NSDL (National Securities Depository limited) or CDSL (Central Depository Services limited), operated through any depository participants.

4.4.2. Sampling Techniques

Convenience based purposive sampling techniques will be used to draw sample. Dematerialization account activity and trading frequency will be considered as criteria for respondent selection. An attempt will be made for randomization in selecting the sample to make it more representative of the population

4.4.3. Sample Size

Taking a statistical approach for calculation of sample size, the various quantitative measures to be considered while determining the sample size are as follows:

a) Variability of population characteristics or standard deviation (σ)

b) Level of confidence desired or Z value (taken as 1.96 for 95% confidence level desired)

c) Degree of precision desired in estimating population characteristics (D)

We have considered the following formula for testing hypothesis around mean (Malhotra, 2011).
$n = \sigma^2 Z^2/D^2$

Here, n = sample size
σ = Standard deviation
Z = Standard normal variate for 95% confidence level
and, D = Degree of precision desired
In order to obtain a representative and realistic sample size we have compared the results of sample size from 3 scenarios:

Scenario 1- Estimating a low standard deviation and high degree of precision.
Scenario 2- Estimating a moderate standard deviation and high degree of precision.
Scenario 3- Estimating a high standard deviation and low degree of precision.

The results are summarized in Table 1

Table 1: Comparative Analysis Taking Different Values of σ and D.

	Scenario 1	Scenario 2	Scenario 3
σ	0.5	0.7	0.9
Z	1.96	1.96	1.96
D	0.1	0.1	0.09
N	96.04	188.2	384.1

Taking an average of the all the three scenarios, considered taking different values of σ and D, the sample size is computed for the study is 222.

Section – V

Chapterization

The thesis will contain the following chapters:

Chapter 1 – Introduction

Chapter 2 – Review of Literature

Chapter 3 – Conceptual Framework

Chapter 4 – Research Design and Methodology

Chapter 5 – Data Collection and Analysis

Chapter 6 – Results and Interpretations

Chapter 7 – Conclusions, Managerial Implications and Direction for Future Research

Chapter 8 – Bibliography and References

Section – VI

References

1. Acker, F. (2008), "New findings on unconscious versus conscious thought in decision making: additional empirical data and meta-analysis," Judgment and Decision Making, Volume 3, Number 4, pp. 292–303.
2. Agor, W. H. (1986), The logic of intuitive decision making: A research based approach for top management, Westport: Quorum Books.
3. Akerlof, G.A. and Dickens, W.T. (1982), "The economic consequences of cognitive dissonance," The American Economic Review, Volume 72, Number 3, pp. 307-319.
4. Andersen, J. A. (2000), "Intuition in managers. Are intuitive managers more effective?" Journal of Managerial Psychology, Volume 15, Number 1, pp. 46–67.
5. Argue, A., Johnson, D.R. and White, L.K. (1999), "Age and Religiosity: Evidence from a Three-'Wave Panel Analysis," Journal of scientific study of religion, Volume 38, Number 3, pp. 423-435.
6. Austin, J. H. (1998), "Zen and the brain: Toward an understanding of meditation and consciousness," Cambridge, MA: MIT Press.
7. Barber, B. and Odean, T. (2001), "Boys will be boys: Gender, overconfidence, and common stock investment," Quarterly Journal of Economics, Volume 116, pp. 261- 292.
8. Barberis, N. (2000), "Investing for the Long Run when Returns Are Predictable," The Journal of Finance, Volume LV, Number 1
9. Bartolomeo, G.D., Papa, S., and Bellomo S. (2012),"Yoga beyond wellness: Meditation, trust and cooperation," Department of Communication, University of Teramo, Working Paper No. 95.
10. Bastick, T. (2003), "Intuition - Evaluating the construct and its impact on creative thinking, Kingston: Stoneman and Lang.
11. Bastick, T. 1982. Intuition: How we think and act. New York:Wiley.
12. Berg, J., Dickhaut, J., and McCabe K. (1995) "Trust, Reciprocity, and SocialHistory", University of Iowa and University of Minnesota.
13. Bertsch, S., and Pesta, B. (2009), "The Wonderlic Personnel Test and elementary cognitive tasks as predictors of religious sectarianism, scriptural acceptance and religious questioning," Intelligence, Volume 37, pp. 231–237.
14. Bishop, S., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., Segal, Z. V., Devins, G. (2004), "Mindfulness: A proposed operational definition," Clinical Psychology: Science and Practice, Volume 11, pp. 230–241.
15. Bolton, L. E., Cohen, J. B., and Bloom, P. N. (2006), "Does marketing products as remedies create a get out of jail free card?" Journal of Consumer Research, Volume 33, pp. 71–81.
16. Borg, M.O., Stranahan, H.A. (2002), "Personality Type and Student Performance in Upper-Level Economics Courses: The Importance of Race and Gender," The Journal of Economic Education, Volume 33, Number 1, pp. 3-14.
17. Borghans, L., A. Duckworth, J. Heckman, and B. Ter Weel (2008), "The Economics and Psychology of Personality Traits," NBER Working Paper, Number 13810.
18. Borko, H., Livingston, C. (1989), "Cognition and Improvisation: Differences in Mathematics Instruction by Expert and Novice Teachers," American Educational Research Journal, Volume 26, Number 4, pp. 473-498

19. Borkovec, T D. (2002), "Life in the future versus life in the present," Clinical Psychology: Science and Practice, Volume 9, pp. 76–80
20. Brazdau, O. (2008), "Research on consciousness experience from the perspective of anthropology of individual. The Consciousness Quotient and CQ Inventory", Doctoral dissertation, Romanian Academy of Science, Bucharest, Romania.
21. Brazdau, O. (2009), "The Conscious Experience: Consciousness Quotient (CQ) and Brazdau CQ Inventory," Paper presented at Toward a Science of Consciousness Conference, Hong Kong, China.
22. Brazdau, O., Mihai, C. (2011), "The consciousness quotient: a new predictor of the students' academic performance, Procedia Social and Behavioral Sciences," Volume 11, pp. 245–250.
23. Brown, K.W., Ryan, R.M. (2003), "The Benefits of Being Present: Mindfulness and Its Role in Psychological Well-Being," Journal of Personality and Social Psychology, Volume 84, Number 4, pp. 822– 848.
24. Bruke L.A., Miller M.K. (1999), "Taking the Mystery out of Intuitive Decision Making," Academy of Management Executive, Volume 13, Number 4, pp 91-99.
25. Bruner, J. (1962), "On knowing. Cambridge: Harvard University Press.
26. Bruner, J.S., Clinchy, B. (1966), "Learning about learning."
27. Cahn, B. R., and Polich, J. (2006), "Meditation states and traits: EEG, ERP, and neuroimaging studies," Psychological Bulletin, Volume 132, Number 2, pp. 180–211.
28. Cañas, J. J., Quesada, J. F., Antolí, A., and Fajardo, I. (2003), "Cognitive flexibility and adaptability to environmental changes in dynamic complex problem-solving tasks," Ergonomics, Volume 46, Number 5, pp. 482–501.
29. Carducci, B. J., and Wong, A. S. (1998), "Type A and risk taking in everyday money matters," Journal of Business and Psychology, Volume 12, pp. 355–359.
30. Carter, O. L., Presti, D. E., Callistemon, C., Ungerer, Y., Liu, G. B., and Pettigrew, J. D. (2005), "Meditation alters perceptual rivalry in Tibetan Buddhist monks," Current Biology, Volume 15, pp. R412–R413.
31. Coval, J., and Moskowitz, T. (1999), "Home bias at home: Local equity preference in domestic portfolios," Journal of Finance, Volume 54, Number 6. pp. 2045-2073.
32. Damasio, A.R. (1994), "Descartes' Error: Emotion, Reason, and the Human Brain. New York: Penguin.
33. Damasio, H., Grabowski, T., Frank, R., Galaburda, A.M., Damasio, A.R. (1994), Science, 264:1102.
34. Dane, E., and Pratt, M. G. (2007), "Exploring intuition and its role in managerial decision making," Academy of Management Review, Volume 32, Number 1, pp. 33–54.
35. Davidson, R. J. (2000), "Affective style, psychopathology and resilience: Brain mechanisms and plasticity," American Psychologist, Volume 55, pp. 1196–1214.
36. Davidson, R. J., and Irwin, W. (1999), "The functional neuro-anatomy of emotion and affective style," Trends in Cognitive Science, Volume 3, pp. 11–21.
37. Davidson, R. J., Kabat-Zinn, J., Schumacher, J., Rosenkranz, M., Muller, D., Santorelli, S. K. (2003), "Alterations in brain and immune function produced by mindfulness meditation," Psychosomatic Medicine, Volume 65, pp. 564–570.
38. Davis, S. H., and Davis, P. B. (2003), "The intuitive dimensions of administrative decision making. Oxford: Scarecrow.
39. DeBondt, W. and Thaler R. (1985), "Does the stock market overreact?," Journal of Finance, Volume 40, Number 3, pp. 793-808.

40. Dhar, R., and Kumar, A. (2001), "A non-random walk down the main street: Impact of price trends on trading decisions of individual investors," Working paper Number 00-45, International Center for Finance, Yale School of Management, New Haven, CT.
41. Dijksterhuis, A. (2004), "Think different: The merits of unconscious thought in preference development and decision making," Journal of Personality and Social Psychology, Volume 87, pp. 586–598.
42. Dijksterhuis, A., Bos, M. W., Nordgren, L. F., and van Baaren, R. B. (2006), "On making the right choice: The deliberation-without-attention effect," Science, Volume 311, pp. 1005–1007.
43. Elster, J. (1998), "Emotions and economic theory," Journal of Economic Literature, Volume 36, Number 1, pp.47–74.
44. Epstein, S. (1998), "Emotions and psychology from the perspective of cognitive-experiential self-theory", in W. F. Flack and J. D. Laird (eds) Emotions in psychopathology: Theory and research, Series in affective science, pp. 57-69. New York, NY: Oxford University Press.
45. Fernando, M., Jackson, B. (2006), "The influence of religion-based workplace spirituality on business leaders' decision-making: an inter-faith study. Journal of Management and Organization," Volume 12, Number 1, pp. 23-39
46. Filbeck, G., Hatfield, P., and Horvarth, P. (2005), "Risk Aversion and Personality Type," The Journal of Behavioral Finance, Volume 6, pp. 170–180.
47. Fischbein, E., Schnarch, D. (1997), "The Evolution With Age of Probabilistic, Intuitively Based Misconceptions," Journal for Research in Mathematics Education, Volume 28, Number 1 (Jan., 1997), pp. 96-105.
48. Fischoff, B., and Slovic, P. (1980), "A little learning: Confidence in multiple judgment tasks. In R. Nickerson (Ed.), Attention and performance, VIII. Hillsdale, NJ: Erlbaum.
49. French, K., and Poterba, J. (1991), "Investor diversification and international equity markets," American Economic Review, Volume 81, Number 2, pp. 222-226.
50. Froot, K.A., Scharfstein, D.A., Stein. J.C. (1992), "Herd on the Street: Informational Inefficiencies in a Market with Short-Term Speculation," The Journal of Finance, Volume 47, Number 4, pp. 1461-1484.
51. Gervais, S., and Odean, T. (2001), "Learning to be overconfident," Review of Financial Studies, Volume 14, pp. 1- 27.
52. Gilovich, T, Griffin, D.W., Kahneman, D, editors. Heuristics and Biases: The Psychology of Intuitive Judgment. Cambridge Univ. Press; New York: 2002
53. Glimcher, P. W., Rustichini, A. (2004), "Neuroeconomic: The Consilience of Brain and Decision," Cognition and Behaviour - Science, Volume 306, pp. 447-452.
54. Goetzmann, W., and Peles, N. (1997), "Cognitive dissonance and mutual fund investors," Journal of Financial Research, Volume 20, Number 2, pp. 145-158.
55. Green D, Swets J (1989) Signal detection theory and psychophysics (Peninsula Publishing, Los Altos Hills, CA),
56. Greenberg, J., K. Reiner and N. Meiran (2012), "Mind the trap: Mindfulness practice reduces cognitive rigidity,"‖ PLoS One, 7: e36206.
57. Grossberg, S., Gutowski, W. E. (1987), "Neural dynamics of decision making under risk: Affective balance and cognitive-emotional interactions," Psychological Review, Volume 94, Number 3, pp. 300-318.

58. Grossman, P., Niemann, L., Schmidt, S., and Walach, H. (2004), "Mindfulness-based stress reduction and health benefits: A meta-analysis," Journal of Psychosomatic Research, Volume 57, pp. 35–43.
59. Halek, M.,J. G., Eisenhauer (2001), "Demography of Risk Aversion," The Journal of Risk and Insurance, Volume 68, Number 1, pp. 1-24.
60. Hammond, K.R. (1993), "Natural decision making from a Brunswikian viewpoint. In G. A. Klein, J. Oras, anu, R. Calderwood, and C. E. Zsambok (Eds.) Decision making in action: Models and methods (pp. 205–227), Westport, CT, US: Ablex Publishing.
61. Hammond, K.R., Hamm, R.M., Grassia, J., Pearson, T. (1987), "Direct comparison of the efficacy of intuitive and analytical cognition in expert judgment," Systems, Man and Cybernetics, Volume 17, Number 5, pp. 753-770.
62. Harteis C., Gruber H. (2007), "Intuition and Professional Competence: Intuitive Versus Rational Forecasting of the Stock Market," Studies in Vocational and Professional Education, 10.1007/s12186-007-9000-z.
63. Hayes, J., C.W., Allinson, Armstrong, S.J. (2004), "Intuition, women managers and gendered stereotypes", Personnel Review, Volume 33, Number 4, pp. 403 – 417.
64. Hitt, M. A., Black, J. S., and Porter, L. W. (2005), Management. Upper Saddle River: Pearson Prentice Hall.
65. Hogarth, R. M. (2001), Educating intuition, Chicago: University Press.
66. Hogarth, R. M. (2005), "Deciding analytically or trusting your intuition? The advantages and disadvantages of analytic and intuitive thought. In T. Betsch, and S. Haberstroh (Eds.) The routines of decision making (pp. 67–82), Mahwah: Lawrence Erlbaum.
67. Isenberg, D. (2001), "How senior managers think," Harvard Business Review, Volume 62, Number 6, pp. 81–90.
68. Jensen, C. G., Vangkilde, S., Frokjaer, V., Hasselbalch, S. G. (2012), "Mindfulness training affects attention—Or is it attentional effort?" Journal of Experimental Psychology: General, Volume 141, Number 1, 106-123.
69. Jensen, L., Jensen, J. (1993), "Family values, religiosity, and gender," Psychological Reports: Volume 73, pp. 429-430.
70. Kabat-Zinn J.(2006), "Mindfulness-Based Interventions in Context: Past, Present, and Future," Clinical Psychology: Science and Practice, Volume 10, Issue 2, pp. 144–156.
71. Kahneman, D. (2002), "Maps of bounded rationality: A perspective on intuitive judgment and choice," Nobel prize lecture, 2002 - wisopsy.uni-koeln.de.
72. Kahneman, D., and Frederick, S. (2002), "Representativeness revisited: Attribute substitution in intuitive judgment. In T. Gilovich, D. Griffin, and D. Kahneman (Eds.) Heuristic and biases. The psychology of intuitive judgment (pp. 49–81), Cambridge: Cambridge University Press.
73. Kahneman, D., and Tversky, A. (1972), "Subjective probability: A judgment of representativeness" Cognitive Psychology, Volume 3, pp. 430–454.
74. Kahneman, D., and Tversky, A. (1979), "Prospect theory: An analysis of decision making under risk," Econometrica, Volume 47, pp. 263- 291.
75. Kahneman, D., Knetsch, J., and Thaler, R. (1990), "Experimental tests of the endowment effect and the coase theorem," Journal of Political Economy, Volume 98, Number 6, pp. 1325-1348.
76. Khatri, N., and Ng, H. A. (2000), "The role of intuition in strategic decision making," Human Relations, Volume 53, Number 1, pp. 57–86.

77. Khumalo, B. (2009), "Higher level of consciousness needed for leadership. Leaders Unlimited [online]. Available from: http://www.leadersunlimited.co.za/news.html
78. Kirton, M. J. (1994) 'Adaptors and innovators at work', in M. J. Kirton (ed) Adaptors and innovators: Styles of creativity and problem solving, pp.51-71. London: Routledge.
79. Kornev, L., and Thissen, W. (2002), "Rationality in decision-and policy-making: implications for strategic environmental assessment," Impact assessment and project appraisal, Volume 18, Number 3, pp. 191-200.
80. Lakonishok, J., Shleifer, A., and Vishny, R. (1994), "Contrarian investment, extrapolation and risk," Journal of Finance, Volume 49, pp. 1541–1578.
81. Larson, E J., Witham L. (1998), "Leading Scientists Still Reject God." Nature pp. 394 - 313.
82. Laufer, O. and Paz, R. (2012), "Monetary Loss Alters Perceptual Thresholds and Compromises Future Decisions via Amygdala and Prefrontal Networks," The Journal of Neuroscience, Volume 32, Number 18, pp. 6304-6311.
83. Lauriola, M., Levin, I. (2001), "Personality traits and risky decision-making in a controlled experimental task: an exploratory study," Personality and Individual Differences, Volume 31, Number 2, pp. 215-226.
84. Lazar, Sara W., Bush, George, Gollub, Randy L., Fricchione, G. L., Khalsa, G., Benson, H. (2000), "Functional brain mapping of the relaxation response and meditation," Neuroreport: Autonomic Nervous System, Volume 11, Number, pp. 1581–1585.
85. Lerouge, D. (2009), "Evaluating the Benefits of Distraction on Product Evaluations: The Mind-Set Effect," Journal of Consumer Research.
86. Leuba, J., (1916), "The Belief in God and Immortality: A Psychological, Anthropological, and Statistical Study," Boston: Sherman, French, and Company.
87. Levin, S.J., Taylor, R.J. (1993), "Gender and Age Differences in Religiosity Among Black Americans," The Gerontologist, Volume 33, Number1, pp. 16-23.
88. Lieberman, M. D. (2000), "Intuition: A social cognitive neuroscience approach ", Psychological Bulletin, Volume 126, Number 1, pp.109-137.
89. Lo, A. and D. Repin. (2002), "The psychophysiology of real-time financial risk processing", Journal of Cognitive Neuroscience, Volume 14, pp. 323-339.
90. Lo, A. W., Repin, D.V., Steenbarger, B. N. (2005), "Fear and Greed in Financial Markets: A Clinical Study of Day-Traders"
91. Loewenstein, G.F. (2000), "Emotions in economic theory and economic behavior," The American Economic Review, Volume 90, Number 2, pp. 426-432.
92. Loewenstein, G.F., Weber, E.U., Hsee, C.K., Welch, N. (2001), "Risk as feelings," Psychological Bulletin, Volume 127, pp. 267-286.
93. Lucey, B. M., Dowling, M. (2005), "The role of feelings in investor decision-making", Journal of Economic Surveys, Volume 19, Number 2, pp. 211-237.
94. Lutz, A., Slagter, H. A., Rawlings, N. B., Francis, A. D., Greischar, L. L., and Davidson, R. J. (2009), "Mental training enhances attentional stability : Neural and behavioral evidence," Journal of Neuroscience, Volume 29, pp. 13418–13427.
95. MacLean, K. A., Ferrer, E., Aichele, S. R., Bridwell, D. A., Zanesco, A. P.,Jacobs, T. L., Saron, C. D. (2010), "Intensive meditation improves perceptual discrimination and sustained attention," Psychological Science, Volume 21, pp. 829–839.
96. Malinowski, B., (1925), "Science, religion and reality", New York, Macmillan.
97. March J G (1994), A Primer of Decision-making (The Free Press, New York),

98. Martino, B. D., Camerer, C.F., Adolphs, R. (2010), PNAS, Volume 107, Number 8, pp. 3788-3792.
99. Mayfield, C., Perdue, G., Wooten, K. (2008), "Investment management and personality type," Financial Services Review, Volume 17, pp. 219–236.
100. Miller, E.M. (1977), "Risk, uncertainty, and divergence of opinion," The Journal of Finance, Volume 32, Number 4, pp. 1151-1168.
101. Moore, A., Malinowski P. (2009), "Meditation, mindfulness and cognitive flexibility," Consciousness and Cognition, Volume 18, pp. 176–186.
102. Mroczek, D.M., Almeida, D.M. (2004), "The Effect of Daily Stress, Personality, and Age on Daily Negative Affect," Journal of Personality and Social Psychology, Volume 72, Number 2, pp. 355-378.
103. Myers, D. G. (2002), "Intuition. Its powers and perils," New Haven: Yale University Press.
104. Newell, B. R., Wong, K. Y., Cheung, J., and Rakow, T. (2008), "Think, blink or sleep on it? The impact of bodes of thought on complex decision making,"
105. Parikh, J., Neubauer, F. and Lank, A. G. (1994), "Intuition: The new frontier in management, Cambridge, MA: Blackwell.
106. Pacini, R.; Epstein, S. (1999), "The relation of rational and experiential information processing styles to personality, basic beliefs, and the ratio-bias phenomenon," Journal of Personality and Social Psychology, Volume 76, Number 6, pp. 972-987.
107. Payne, J. W., Samper, A., Bettman, J. R., and Luce, M. F. (2007), "Boundary conditions on unconscious thought in complex decision making," Manuscript in preparation.
108. Peters, E. and Slovic, P. (2000), "The Springs of Action: Affective and Analytical Information Processing in Choice. Personality and Social Psychology Bulletin. 26(12), 1465-1475.
109. Petitmengin and Peugeot, C. (1999), "The intuitive experience", Journal of Consciousness, Volume 6, Number 2-3, pp. 43-77.
110. Price, M. C. and Norman, E. (2008), "Intuitive decisions on the fringes of consciousness: Are they conscious and does it matter?" Judgment and Decision Making, Volume 3, Number 1, pp. 28–41.
111. Rangel, A., Camerer, C., Montague, P.R. (2008), "A framework for studying the neurobiology of value-based decision making," Nat Rev Neurosci, Volume 9, pp. 545–556.
112. Reber, A. S. (1993), "Implicit learning and tacit knowledge – An essay on the cognitive unconscious," New York: Oxford University Press.
113. Sadler-Smith, E. (2004), "Cognitive style and the management of small and medium sized enterprises," Organization Studies, Volume 25, Number 2, pp. 155–181.
114. Sadler-Smith, E., Shefy, E. (2004), "The intuitive executive: understanding and applying 'gut feel' in decision-making," Academy of Management Executive, Volume 18, Number 4, pp. 76–91.
115. Shefrin, H. (2001), Behavioral finance. Cheltenham, UK: Edward Elgar Publishing.
116. Simon, H. A. (1957), Models of man. New York: Wiley.
117. Simon, H. A. (1987), "Making management decisions: The role of intuition and emotion," Academy of Management Executive, Volume 1, Number 1, pp. 57–64.
118. Sinclair M., Ashkanasy N.M., (2005), "Intuition: Myth or a Decision-Making Tool?" Management Learning, Volume 36, Number 3, pp. 353-370.
119. Slagter, H. A. (2007), "Mental training affects distribution of limited brain resources. PLoS Biology, 5, e138.

120. Slagter, H. A., Lutz, A., Greischar, L. L., Nieuwenhuis, S., and Davidson,R. J. (2009), "Theta phase synchrony and conscious target perception: Impact of intensive mental training," Journal of Cognitive Neuroscience, Volume 21, pp. 1536–1549.
121. Sloman, S. A. (2002), "Two systems of reasoning. In T. Gilovich, D. Griffin, and D. Kahneman (Eds.) Heuristic and biases. The psychology of intuitive judgment (pp. 379–396), Cambridge: Cambridge University Press.
122. Sokol, H. P., Hsu M., Curley, N.G., Delgado, M.R., Camerer, C.F., Phelps, E.A. (2009), "Thinking like a trader selectively reduces individuals' loss aversion," Proc Natl Acad Sci U S A, Volume 106, pp. 5035–5040.
123. Tang, Y. Y., Ma, Y., Wang, J., Fan, Y., Feng, S., Lu, Q., Posner, M. I. (2007), "Short-term meditation training improves attention and self-regulation," PNAS: Proceedings of the National Academy of Sciences
124. Tartaro, J., Luecken, L.J., E. Gunn H.E.(2005), "Exploring Heart and Soul: Effects of Religiosity/Spirituality and Gender on Blood Pressure and Cortisol Stress Responses," Journal of Health Psychology, Volume 10, Number 6, pp. 753-766.
125. Taylor, R.J., Chatters, L.M., Jackson, J.S. (2007), "Religious and Spiritual Involvement Among Older African Americans, Caribbean Blacks, and Non-Hispanic Whites: Findings From the National Survey of American Life," The Journals of Gerontology: Series B, Volume 62, Number, pp. S238-S250.
126. Thaler, R. (1980), "Toward a positive theory of consumer choice," Journal of Economic Behavior and Organisation, Volume 1 Number 1, pp. 39-60.
127. Tversky, A., and Kahneman, D. (1981), "The framing of decisions and the psychology of choice," Science, Volume 211, pp. 453- 458.
128. Vasconcelos, A.F., (2009), "Intuition, prayer, and managerial decision-making processes: a religion-based framework", Management Decision, Volume 47, Number 6, pp. 930 – 949.
129. Warnerd, K. E. (1996), "Risk attitude and risky behavior," Journal of Economic Psychology, Volume 17, pp. 749–770.
130. Westcott, M. R. (1968), "Psychology of intuition. A historical, theoretical, and empirical inquiry. New York: Holt, Rinehart and Winston.
131. Wilson, T.D. (2002), "Strangers to ourselves: Discovering the adaptive unconscious. Cambridge, MA: Harvard University Press.
132. Witteman, C., Bercken, J., Claes, L., and Godoy, A. (2009), "Assessing Rational and Intuitive Thinking Styles," European Journal of Psychological Assessment, Volume 25, Number 1, pp. 39–47.
133. Zeidan, F., Johnson, S. K., Diamond, B. J., David, Z., Goolkasian, P. (2010), "Mindfulness meditation improves cognition: Evidence of brief mental training," Consciousness and Cognition, doi:10.1016/j.concog.2010.03.014

Research Scholar	Supervisor	Co-Supervisor	Head & Dean
Rupali Misra Nigam	Dr. Sumita Srivastava	Prof. D. K. Banwet Professor Emeritus Department of Management Studies IIT – Delhi	Prof. Sanjeev Swami Dept. of Management Faculty of Social Sciences